

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1. (Currently Amended) A method of access control for a movable network managed by a mobile router, wherein said mobile router is interconnected through a bi-directional link with a mobility anchoring agent that anchors the network mobility for the mobile router, said method comprising the steps of:
~~exercising access control~~ filtering at the mobility anchoring agent, ~~to filter~~ downlink packets to said mobile router to eliminate unauthorized downlink packets before the packets are transmitted over an air interface; and
~~exercising access control~~ filtering at said mobile router, ~~to filter~~ uplink packets to said mobility anchoring agent to eliminate unauthorized uplink packets before the packets are transmitted over the air interface.
2. (Original) The method of claim 1, wherein said mobility anchoring agent is a home agent in a home network of said mobile router.
3. (Original) The method of claim 1, wherein said mobility anchoring agent is a local forwarding agent in a visited network.
4. (Original) The method of claim 1, wherein said mobility anchoring agent runs a NEMO-based (Network Mobility) mobility support protocol with said mobile router.
5. (Currently Amended) The method of claim 4, wherein said mobile router is interconnected with said mobility anchoring agent through a NEMO bi-directional tunnel, and the mobility anchoring agent filters downlink packets ~~are filtered~~ before said NEMO bi-directional tunnel, and the mobile router filters uplink packets ~~are filtered~~ before said NEMO bi-directional tunnel.

6. (Currently Amended) The method of claim 1, wherein said step of ~~exercising access control~~ filtering downlink packets at the mobility anchoring agent ~~involves~~ includes checking headers of downlink IP packets that traverse an access control point in said mobility anchoring agent, and said step of ~~exercising access control~~ filtering uplink packets at said mobile router ~~involves~~ includes checking headers of uplink IP packets that traverse an access control point in said mobile router.

7. (Currently Amended) The method of claim 1, further comprising the step of provisioning ~~[[an]]~~ a first access control module at said mobility anchoring agent and ~~[[an]]~~ a second access control module at said mobile router with provisioning information from an access control source.

8. (Currently Amended) The method of claim 7, wherein said provisioning step comprises the steps of:
transferring provisioning information for the first and second access control modules ~~in both said mobility anchoring agent and said mobile router~~ from said access control source to said mobility anchoring agent; and
subsequently forwarding provisioning information for the second access control module ~~in said mobile router~~ from said mobility anchoring agent to said mobile router over the bi-directional link.

9. (Currently Amended) The method of claim 8, wherein said provisioning information for the second access control module ~~in said mobile router~~ includes provisioning information related only to the uplink from said mobile router to said mobility anchoring agent.

10. (Canceled)

11. (Previously Presented) The method of claim 7, wherein said access control source is implemented in an Authentication, Authorization and Accounting (AAA) client, and provisioning information related to a node in said movable network is transferred from an AAA server associated with the home network of said node to said AAA client and the access control source.

12-15. (Canceled)

16. (Currently Amended) An arrangement for access control for a movable network managed by a mobile router, wherein said mobile router is interconnected through a bi-directional link with a mobility anchoring agent that anchors the network mobility for the mobile router, said arrangement comprising:

means for ~~exercising access control~~ filtering at the mobility anchoring agent, ~~to filter downlink packets to said mobile router~~ to eliminate unauthorized downlink packets before the packets are transmitted over an air interface; and

means for ~~exercising access control~~ filtering at said mobile router, ~~to filter uplink packets to said mobility anchoring agent~~ to eliminate unauthorized uplink packets before the packets are transmitted over the air interface.

17-18. (Canceled)

19. (Original) The arrangement of claim 16, wherein said mobile router and said mobility anchoring agent are configured to run a NEMO-based (Network Mobility) mobility support protocol.

20. (Currently Amended) The arrangement of claim 19, wherein said mobile router is interconnected with said mobility anchoring agent through a NEMO bi-directional tunnel, and said ~~access control exercising~~ filtering means at said mobility anchoring agent ~~is operable for filtering said~~ filters the downlink packets before said NEMO bi-directional tunnel, and said ~~access control exercising~~ filtering means at said

~~mobile router is operable for filtering said~~ filters the uplink packets before said NEMO bi-directional tunnel.

21-30. (Canceled)

31. (Currently Amended) A mobility anchoring agent for anchoring network mobility for a mobile router that manages a movable network, wherein said mobility anchoring agent comprises:

means for ~~interconnection~~ interconnecting with said mobile router through a bi-directional link; and

means for ~~exercising access control to monitor and filter~~ monitoring and filtering downlink packets to said mobile router to eliminate unauthorized downlink packets before the downlink packets are transmitted over the bi-directional link.

32. (Original) The mobility anchoring agent of claim 31, wherein said mobility anchoring agent is configured to run a NEMO-based (Network Mobility) mobility support protocol with said mobile router.

33. (Currently Amended) The mobility anchoring agent of ~~claim 31~~ claim 32, wherein ~~said mobility anchoring agent is configured for interconnection~~ the means for interconnecting with said mobile router ~~through~~ includes a NEMO bi-directional tunnel, and said means for ~~exercising access control is operable for filtering said~~ monitoring and filtering filters the downlink packets before said NEMO bi-directional tunnel.

34. (Currently Amended) The mobility anchoring agent of claim 31, wherein said means for ~~exercising access control is operable for checking~~ monitoring and filtering checks headers of packets that traverse an access control point in said mobility anchoring agent.

35. (Currently Amended) The mobility anchoring agent of claim 31, further comprising:

means for receiving provisioning information for access control at both said mobility anchoring agent and said mobile router from an access control source; and

means for forwarding provisioning information for access control at said mobile router to said mobile router.

36. (Original) The mobility anchoring agent of claim 35, wherein said provisioning information for access control at said mobile router includes information related only to the uplink from said mobile router to said mobility anchoring agent.

37. (Canceled)

38. (Currently Amended) An access control enforcement module for operation with a mobility anchoring agent that anchors network mobility for a mobile router managing a movable network, said mobile router being interconnected through a bi-directional link with said mobility anchoring agent, wherein said access control enforcement module ~~is operable for exercising access control to monitor and filter~~ includes means for monitoring and filtering downlink packets to said mobile router to eliminate unauthorized downlink packets before the downlink packets are transmitted over the bi-directional link.